

# Farming according to the Grand Defter of Gurjistan Vilayet of 1595

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## Abstract

This article describes the economic situation, particularly the tradition of Georgian farming culture, in southwestern part of Georgia, concurred by the Ottoman Empire in the 16th century and called Gurjistan Vilayet by the Ottomans. Gurjistan Vilayet covered a significant area of southwestern Georgia, with only a tiny part being a part of Georgia and the remained territory being a part of the Republic of Turkey, the legal successor of the Ottoman Empire. The study is mainly based on the Grand Defter of Gurjistan Vilayet. In the study's course, the geographical objects (villages, sites of ancient villages, sowing areas, etc.) given by the Defter were identified, systematized, and classified and a GIS database and relevant maps were developed. The objects plotted on the map were identified by comparing with other sources used to identify the types and amounts of taxes set by the Ottoman for the population, group them thematically, and draw a picture of the region's economic potential. It was found that the Georgian economic tradition was solid and sustainably profitable, but the Ottoman ideological press had a particular effect on it.

**Keywords:** Gurjistan Vilayet, Liva, Nahiyah, Ottoman Defters, 16th century, Farming

## Introduction

Following the conquest of the southwestern part of Georgia by the Ottomans in the 16th century, a new administrative-territorial unit - "Gurjistan Vilayet" was formed, where Islamization and gradual eradication of the remnants of Georgian culture started. However, this process was slow and gradual. The first change made by the Ottomans in the occupied territories was the introduction of the Ottoman tax system, which was based on religious discrimination. In particular, the Christians paid higher taxes than the Muslims. This supported the substitution of the Christian faith in Islam, which was dangerous for the traditional Georgian culture. When the forced transformation of the traditional Georgian culture started in the area, how it developed and which areas it covered is an essential issue of a scientific study. Studying this issue through scarce, old Georgian sources is virtually impossible. Consequently, the old Ottoman documents are an irreplaceable source. The most important of them is the population census books.

"The Grand Defter of Gurjistan Vilayet", dated 1595, is the first document translated and published in Georgian, which describes the political, socio-economic, and cultural situation of this newly conquered territory of Georgia. The Grand Defter was a subject of interest to many scholars [1-6]. However, because of its diversity and information value, many interesting novelties are still found in the document.

## Study Area

As per the Defter of 1595, Gurjistan Vilayet was divided into 8 Livas and 28 Nahiyah. These Livas are: Akhaltsikhe, Khertvisi, Akhalkalaki, Chrdili, Potskhovi, Petre, Didi-Artaani and Panak. According to the map compiled by Al. Aslanikashvili [7], there were 9 Livas and 37 Nahiyahs in Gurjistan Vilayet, although the Defter says that Oltisi Liva inscription was made sometime later [1], i.e., it does not belong to the Defter of 1595.

The area of Gurjistan Vilayet was 11 791 km<sup>2</sup> (excluding Oltisi Liva) [8]. The Livas of Gurjistan Vilayet occupied utterly different areas due to their different natural conditions. After all, the borders between the Livas were fixed with mountain systems and river valleys. The biggest (Akhaltsikhe) Liva was almost four times bigger than the smallest (Potskhovi) Liva. There were five big Livas in the Vilayet: Akhaltsikhe, Akhalkalaki, Didi Artaani, Chrdili, and Panak, while the area of 3 other Livas (Petre, Khertvisi, and Potskhovi) was less than 950 km<sup>2</sup>.

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## Methods and Materials

The study is based on the Grand Defter of Gurjistan Vilayet of 1595, prepared by the Ottoman Empire, translated from Turkish to Georgian, and published in 1941 by S. Jikia. The Turkish original of the Grand Defter of Gurjistan (hereinafter "The Defter") was written on 490 quite large pages and is preserved at the Korneli Kekelidze Georgian National Center of Manuscripts [Fund # 478]. The document gives extremely rich and diversified data about the social-economic situation of then-time Georgia, regarding which S. Jikia, the translator and researcher of the Defter wrote: "The feudal Ottoman Empire, owing to unequal forces, succeeded in isolating it from Georgia, which had the economic riches and traditions of the high culture of the many-century-long history of Georgia" [1].

"The map of Gurjistan Vilayet" [7], different-scale (1:100,000; 1:50,000) Soviet topographic maps, maps in the old verst system (scales: 1 inch: 5 versts and 1 inch: 10 versts), 3-dimensional Google Earth geo-images were also used as primary sources.

The paper relies on the agricultural data given in the "Defter", mainly the information related to farming, which tells us about the kinds of crops the people of the region grew and the geography and intensity of the crops. Defter's data are compared with the latest data, including the ethnographic studies of the 20th century. The study used comparative, semantic, quantitative, and retrospective mapping methods.

## Results and Discussion

General features of agriculture. Regarding "The Grand Defter of Gurjistan Vilayet" of 1595, Sh. Lomsadze wrote: "It shows us enslaved people deprived of all rights and grouped by villages and cities; the heads of the families who are referred to by their names and patronymics (as it was common in Turkey) ... the sites of ancient villages and cities, desolate and "empty of Rayah (peasant)" [8]. Furthermore, Defter gives a picture: almost 1/3 of the villages are deserted.



Figure 1. Total taxes according to Livas (%)

As per our calculations, there were 1070 objects named in the Vilayet (excluding Oltisi Liva), but only 726 of them had permanent residents, while the rest of the locations were deserted, i.e., were sites of ancient villages. The agricultural lands in these villages were used by the people from the surrounding villages who therefore paid relevant agricultural taxes. It is of these taxes; these villages were included in the Defter. Presumably, the Vilayet had many more sites of ancient villages abandoned entirely by their permanent inhabitants and by the farmers from the neighbouring villages, who would cultivate the abandoned land to gain harvest. Such state of affairs indeed impacted Vilayet's economy, as the statistics from Defter show.

The residents of Gurjistan Vilayet paid 64 different types of taxes, including 55 agricultural and nine non-agricultural taxes. Akhaltsikhe and Didi Artaani Livas paid the highest taxes, and the minor taxes were paid by Petre Liva (Fig. 1).

The Vilayet paid 9 391 732 akçe (the chief monetary unit of the Ottoman Empire and neighbouring countries in 14<sup>th</sup>-19<sup>th</sup> centuries). The biggest Livas paid the highest taxes. Namely, the first three biggest Livas were: Akhaltsikhe (paying 2 942 868 akçe), Didi Artaani (paying 1 458 612 akçe) and Akhalkalaki (paying 1 120 480 akçe) Livas. Petre Liva paid the lowest tax (475,305 akçe).

The situation will be the opposite if calculating the total taxes by homesteads. On average, the population of Vilayet paid 593 akçe per homestead. Petre Liva was charged with a maximum tax (1657 akçe), and Didi Artaani Liva paid the minimum tax (340 akçe), the former paying a five times higher

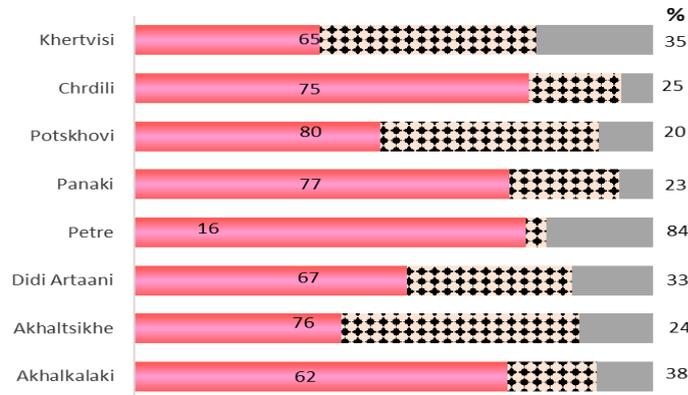


Figure 2. Share of villages and ancient villages in Gurjistan Vilayet (%)

tax than the latter meaning that virtually, the inhabitants of Didi Artaani Nahiyah must have had higher incomes. This is logical since Petre Nahiyah was already relatively depopulated by then, and most sites of ancient villages of all Vilayet were found on its territory (Fig. 2). At the same time, the situation in Didi Artaani Liva was “calmer”, and this figure was close to the average value of the Vilayet.

There was no significant difference between the amounts and types of agricultural and non-agricultural taxes in different Livas (Fig. 3). The average difference for the non-agricultural tax was

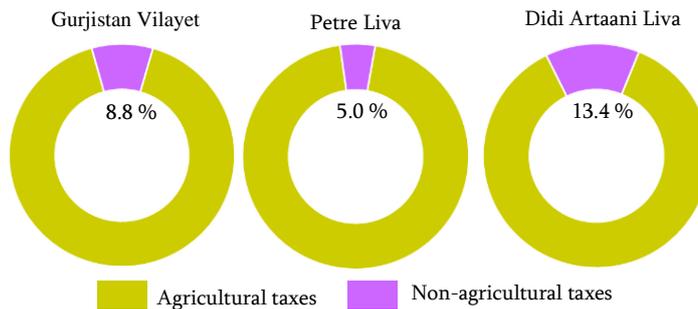


Figure 3. Agricultural and non-agricultural taxes

8.8%. There is a more considerable difference in different Nahiyahs and villages. All over the Vilayet, the maximum (56.0%) non-agricultural taxes were paid by Panaskerti Nahiyah of Panak Liva, while Petre Nahiyah of Petre Liva paid the minimum (2.9%) taxes.

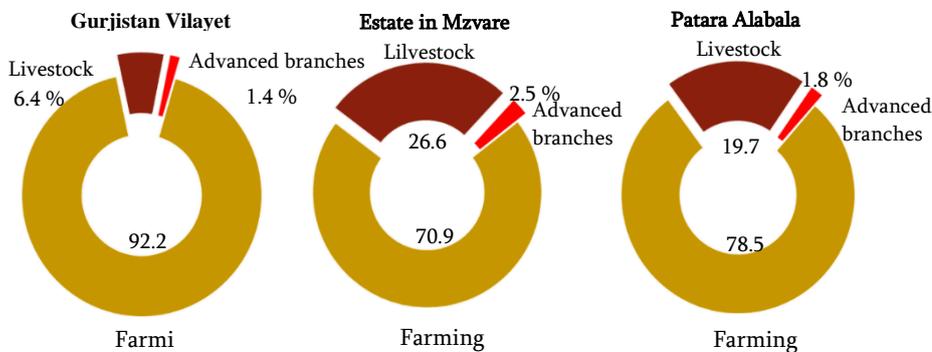


Figure 4. Branch structure Gurjistan Vilayet

There is an even greater disproportion between the villages. Across the Vilayet, the maximum (46.2%) non-agricultural taxes were paid by village Gura of Mzvare Nahiyah of Didi Artaani Liva. This was due to two circumstances: 1) the village had many (133) households, with their majority being Christians who were consequently charged with higher non-agricultural taxes (hispenje, murahasi), i.e., non-agricultural taxes. They account for the largest share (39%) of total taxes; 2) low tax on grain (wheat, barley), just 3600 akçe. This is a meager tax for the village for so many homesteads. For comparison, take village Zanazgomi with only 13 households paying the same tax (3600 akçe) on grain as big village Gura with many homesteads used to pay. At the same time, we would note that such a big difference in taxes between these two villages evidences a big difference in the incomes of the two. Village Zanazgomi had a much higher income, i.e., the natural conditions in this village were most favourable to grow grain.

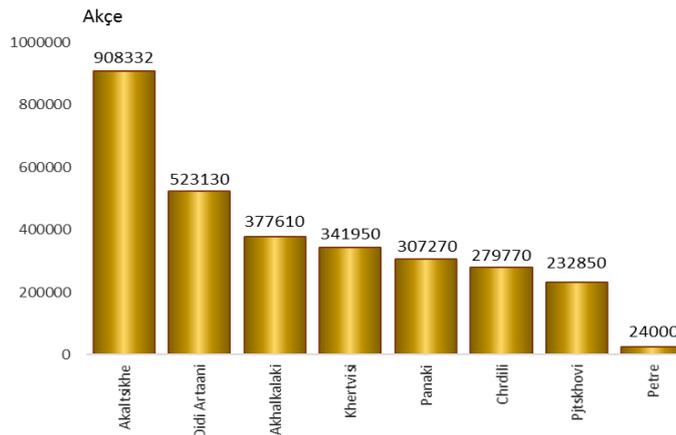


Figure 5. Taxes on wheat according to Livas (Akçe)

Several agricultural branches were developed in Gurjistan Vilayet. The taxes in farming were much higher than in cattle-breeding (Fig. 4), with 92% and 8% specific weight ratios. This ratio varied more or less across the Livas, Nahiyahs, and villages, particularly differentiating between the villages. For example, in one of the estates of Mzvare Nahiyah of Didi Artaani Liva [“Defter”, p. 405, #3], the share of cattle-breeding was almost 27%. The situation is similar in village Patara Alabala of the same Nahiyah where the share of cattle-breeding was much higher than the average value of the Vilayet.

Grain-growing was the most developed branch all over Gurjistan Vilayet. A total of 5,954,870 akçe that is almost 64% of the total tax and 86% of the agricultural tax was paid by the Vilayet. The highest tax (2,025,492 akçe) was paid by Akhaltsikhe Liva, which accounted for more than 1/3 of the relevant Vilayet tax. Didi Artaani Liva ranked second (with 923,986 akçe). Both of these Livas paid almost 1/2 of the total tax. Petre Liva was charged with the least tax (50,750 akçe).

However, a homestead-based calculation gave a completely different picture. The highest tax on cereals per household was paid by Petre Liva (1450 akçe), with all other Livas felling much behind it. This tax was the least (341 akçe) in Didi Artaani Liva. Such a significant imbalance with the primary agricultural crop is the sign of the different economic standing of the population. In this respect, Petre Liva was in the most unfavourable situation.

As is clear from the taxes, the people grew four cereal varieties: wheat, barley, rye and millet. Essential cereals were wheat and barley. The total wheat tax was 2,994,912 akçe, and the barley tax was 2,635,172 akçe. These crops were grown in all Livas and Nahiyahs (Fig. 5).

As already mentioned, the highest was the wheat tax amounting to 2,994,912 akçe, i.e., 1/2 of the cereal tax. The cereal tax was exceptionally high (908,332 akçe) in Akhaltsikhe Liva, accounting for almost 1/3 of the Vilayet wheat tax. This tax was similarly high in Didi Artaani (523,130 akçe) and Akhalkalaki (377,610 akçe) Livas. The aggregate data of all three Livas are over 60% of all Vilayet taxes. Thus, the given Livas were the principal wheat “producers”. Petre Liva paid the least tax (24,000 akçe). The forested Nahiyah of Didi Artaani Liva paid the highest tax (227,000 akçe). It was followed by Akşehir Nahiyah of Akhalkalaki Liva (221,110 akçe). With this tax too, none of Nahiyahs of Akhaltsikhe Liva is ahead of others what is easy to explain: Akhaltsikhe Liva occupied a large area and

was administratively divided into many (8) units so that the total value was distributed among those units.

The second leading crop was barley. A total of 2,635,172 akçe, i.e., more than 44% of cereal tax was levied. At the same time, alongside barley, wheat accounted for the largest share of the grain tax (almost 95%) in Gurjistan Vilayet. Like wheat, barley was grown in all Livas and Nahiyahs (Fig. 6). The highest barley tax was paid by Akhaltsikhe Liva (more than 1/3 of the barley tax of the Liva). With this tax too, Didi Artaani Liva ranked second (397,776 akçe), Khertvisi Liva ranked third (305,120 akçe), and Petre Liva paid the least tax (26,000 akçe). However, with this value, the latter exceeded the corresponding wheat tax. Of Gurjistan Vilayet, Petre Liva was the only one where the barley tax was higher than the wheat tax. The situation was completely different with the total barley tax per homestead, where Petre

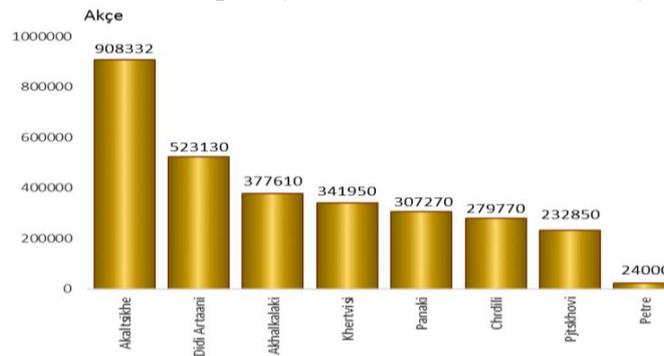


Figure 6. Taxes on barley according to Livas (Akçe)

Liva paid the maximum tax per household (743 akçe), and Didi Artaani Liva paid the minimum tax (111 akçe).

As evidenced by tax amounts, Rye and millet must have been much less critical. This is evidenced by the fact that the sum of taxes on two cereal varieties paid by the Liva was less than the taxes paid by individual Nahiyahs (Akhaltsikhe, Akhalkalaki, Didi Artaani and Khertvisi) on wheat. A total of 230,936 akçe was paid as a rye tax by the whole Vilayet. An exceptionally high tax (116,600 akçe) was paid by Akhaltsikhe Liva, which was more than 1/2 of the total rye tax of the Vilayet. This was an exceptionally high value. As proof of this, it may be said that this tax was almost three times higher than that of Akhalkalaki Liva (41,320 akçe), ranking second. Akhalkalaki (39.8 akçe) and Khertvisi (39.3 akçe) Livas paid the highest tax per household, and Artaani Liva paid the least tax (0.9 akçe). The least common cereal was millet, and a total of 93,850 akçe was levied on it, making only 1.5% of all cereal taxes. As millet was the least common crop, Didi Artaani and Chrdili Livas did not pay any tax. This tax was minimal for Petre, and Akhalkalaki Livas and not all Nahiyahs of other Livas paid it. Akhaltsikhe Liva paid the highest tax (67,620 akçe), making up more than 72% of the total rye tax. All Nahiyahs in the said Liva paid this tax, with Ude Nahiyah paying the highest tax. The tax was also high (16,400 akçe) in Panak Liva.

Several studies were used to establish that Georgia is located in the geographical area where wheat crops were cultivated, as evidenced by six endemic wheat species and their varieties found in Georgia [10-12]. A unique role in this respect was played by historical Meskheta or the region where Gurjistan Vilayet was located for some time. The people widely used such cereals as wheat and barley until the mid-twentieth century [13]. Alongside the endemic wheat varieties, more than 50 botanical forms of barley are found in Georgia [14]. The fact of wheat and barley species and their varieties having survived to the industrialization epoch proves their great importance for Georgian farmers, and “The Grand Defter of Gurjistan Vilayet” clearly proves its importance.

They also grew legumes in Gurjistan Vilayet. The legumes, alongside the cereals, played an essential role in the agricultural life of the Georgians. Legumes are known to be rich in proteins and to be very important for living organisms. In Georgia, “in the past, people traditionally did not eat meat every day, and fasting prohibitions of the Christian religion played quite an important role in it. Therefore, the deficit of meat proteins in human food was compensated by the products rich in legume proteins and nitrogenous substances” [15]. Thus, legumes have been known in Georgia since ancient times. A total tax of 26 755 akçe was levied on the legumes in Gurjistan Valayet. This is a meagre figure compared

to the cereal tax. At the same time, only 3 Livas was charged with legume tax: Akhaltsikhe (24,965 akçe), Panak (120 akçe) and Khertvisi (1690 akçe).

Defter shows that three legume varieties were grown to Gurjistan Vilayet: peas, lentils and broad beans. Peas (accounting for 43% of total tax on legumes) and lentils (35%) must have been widely spread. Only the residents of Akhaltsikhe Liva paid taxes on broad beans. The highest tax on all three legume varieties was paid by Ude Nahiyah of Akhaltsikhe Liva, accounting for almost 1/3 of the tax on legumes in Akhaltsikhe Liva. Villages paid exceptionally high taxes: Uraveli and Tskordza, paying 2.5-3 times higher legume taxes than other villages.

Flax must have been another critical agricultural crop. Except for Petre and Panak Livas, all of its Livas was taxed. The total tax amounted to 23,294 akçe. Exceptionally high tax on flax (11,550 akçe)

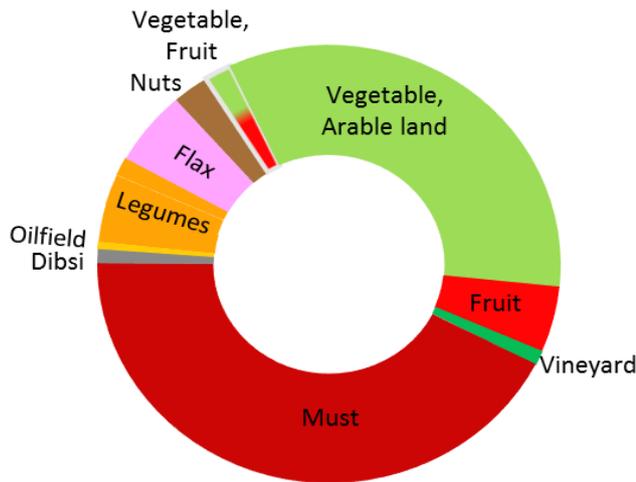


Figure 7. Some land taxes (excluding wheat)

was paid by Akhaltsikhe Liva, making almost 1/2 of its total taxes. At the same time, flax must have been a widely spread crop in Liva as all Nahiyahs paid its tax. The maximum tax (250 akçe) of villages was paid by village Kvemo Pamaji of Chrdili Nahie of the same Liva. Flax tax was similarly high in Akhalkalaki Liva (4408 akçe).

Vegetable-growing was one of the most advanced branches in Gurjistan Vilayet, as evidenced by the size of its total tax and the vast majority of villages paying it (Fig. 7). The population of the Vilayet paid a total of 84,731 akçe on vegetables accounting for more than 1/5 of the total taxes on farming (except cereals), which was quite a significant value. The vegetable patch tax must have been even higher. In particular, two more taxes should be added to this value: 1) the tax levied on sowing areas (57,330 akçe), which obviously refers to arable lands, i.e., vegetable patches and orchards, and 2) tax levied on fruits and vegetables (4811 akçe), which makes it impossible to determine the exact share of vegetables, but we can probably assume tax of 1/2-1/2 per each. This means that the share of vegetable-growing and gardening was taxed by a total of 142 261 akçe, i.e., making more than 1/3 of the total taxes on farming (excluding cereals).

As M. Svanidze wrote, based on the nineteenth-century data, alongside vegetables and watermelons, they grow pumpkins, dill, cabbage, melons, celery, garlic, mint, carrots, coriander, savoury, beets, onions, etc. all over the Principality of Samtskhe [4]. It is not excluded that the listed products were the region's traditional crops and were grown even in the 16th century.

The highest tax on vegetables and watermelons was paid by Akhaltsikhe Liva (28,127 akçe), accounting for almost 1/4 of total taxes on vegetables in the Vilayet. It was followed by Didi Artaani Liva (18,221 akçe). Elsewhere, the maximum vegetable tax alone was 9000 akçe. Of the Nahiyahs, the highest tax (8024 akçe) was paid by the forested Nahiyah of Didi Artaani Liva. All over the Vilayet, the vegetable tax averaged 6.7 akçe per household. Petre Liva paid the highest (14.3 akçe) tax, and Panaki Liva paid the least tax (3.8 akçe).

The vegetable tax was levied in fact on every village. The only exceptions are a tiny village with 2 or 3 households or estates, where not all taxes were enlisted. Consequently, it may be said that vegetable-growing was common everywhere, although it seems that it was not equally developed

everywhere and hardly survived at the devastated locations, where the Ottoman officials had not even mentioned it. The highest taxes were paid by some villages, with the first three villages of Klde of Mzvare Nahiyah of Akhaltsikhe Liva (790 akçe), village Okami of Akshehir Nahiyah of Akhalkalaki Liva (600 akçe) and village Panakis Rabati of Panak Nahiyah of Panak Liva (534 akçe). It is noteworthy that these villages are not large, with some households of 20-38. Therefore, per household tax was high (15-30 akçe). An opposite picture is seen in some other villages with more households where the vegetable tax is much lower, e.g., the villages of Panak Nahiyah of Panak Liva: Bariq (with 42 households paying vegetable tax of 150 akçe), villages Zemo Arsenak and Shua Arsenak (with 138 households paying 242 akçe) and village Kotik (with 40 households paying 150 akçe).

Viticulture and fruit-growing must have been one of the most advanced branches in Gurjistan Vilayet, as evidenced by several circumstances, primarily the taxes on fruit, vineyards and must. The highest land tax (almost ½ of all taxes), excluding cereals, was a must. The fruit and vineyard tax proportions were much lower.

Vineyard tax was levied in 3 Livas and made 1951 akçe. The maximum tax was paid by Akhaltsikhe Liva (871akçe) and Panak Liva (550 akçe). Khertvisi Liva ranked the third (410 akçe). All three of these Livas accounted for 95% of the vineyard tax. It is also interesting to note that the vineyard grew in the Livas located farther south, i.e., where today the local people do not grow vines. Such Livas are Akhalkalaki and Potskhovi. In proof, we cite the relevant data from "Meskhetian Chronicles of the Psalter", the same as "Meskhetian Chronicles" (16<sup>th</sup> century). There is also a reference where the village of Oloda, located in the southwestern part of modern Akhalkalaki Plateau, is mentioned. It was located at a 1900-1940 m above sea level. The document states that in addition to fruit-growing and cattle-breeding, viticulture was also developed in the area [16]. This is confirmed by later sources as well: "According to Ballas, in 1895, there were only ten vineyards of 3 dessiatines in Akhaltsikhe Province" [17]. Another interesting fact is that Didi Artaani Liva located even further south was charged vineyard tax. These issues need further in-depth study.

A higher (20 395 akçe) than the vineyard tax was levied on fruit. Akhaltsikhe and Khertvisi Livas had to pay the highest taxes (16 046 and 2075 akçe, respectively), although Akhaltsikhe Liva was still leading, paying 8-9 and even several tens of times higher tax than other Livas. Exceptionally high taxes

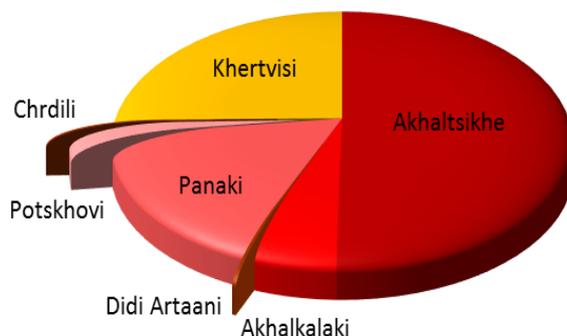


Figure 8. Taxes on must according to Livas

were paid by Atskuri (3930 akçe), Chacharakhi (3350 akçe) and Mzvare (2430 akçe) Nahiyahs.

Interestingly, must (the grape of fruit juice) was similarly high in Akhaltsikhe and Khertvisi Livas. Two Livas: Didi Artaani and Panak did not pay fruit tax. The latter is of particular interest since the Liva paid vineyard tax and must, but not fruit tax. These evidences the intensive development of viticulture in the region.

Gurjistan Vilayet paid 179,540 akçe as must. This tax varied a lot across the area (Fig. 8). The Livas in the northern and southern parts of the Vilayet paid the taxes, while the Livas in the central part were not taxed. Only 2 Livas (Didi Artaani and Oltisi) paid this tax. 3 Livas (Akhaltshikhe, Khertvisi, Panak) were charged with the highest tax, with Akhaltsikhe Liva ranking the first, paying 90 440 akçe. This tax for Akhaltsikhe Liva was twice as much as Khertvisi Liva, which ranked second. It was these 3 Livas paying the significant proportion of must (92%).

## Conclusion

Farming was a leading branch in Gurjistan Vilayet, according to the analysis of statistical data given in the Defter evidence. Where grain-growing was particularly important, Grain-growing was more or less common in all Livas and Nahiyahs. There were two other advanced agricultural branches in the area: fruit-growing and vegetable-growing. Vegetable-growing seemed to be developed all over the region, particularly in Akhaltsikhe and Didi Artani Livas. An exception was Petre Liva, who was depopulated that diminished many agricultural sectors. Fruit-growing and viticulture were developed in all Livas, but showed more imbalance. Fruit-growing and viticulture were particularly well developed in Akhaltsikhe, Akhalkalaki and Khertvisi Livas.

It is known that farming has always been the essential branch of Georgian agriculture. The data of the Defter evidence that farming in southwestern Georgia, which the Ottomans conquered by the end of the 16th century, was a pretty well-developed field of agriculture. The Defter evidence that although the conquest of the region reduced the population and hampered the region's development, it did not harm the Georgian agricultural traditions, as evidenced by the region's diverse and highly productive cereals and legumes. The data of the Defter also evidence relatively well-developed viticulture in the given region, proving that the Georgians firmly maintained this traditional branch.

### **Competing interests**

The authors declare that they have no competing interests.

### **Authors' contribution**

All authors contributed to the final version of the manuscript.

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